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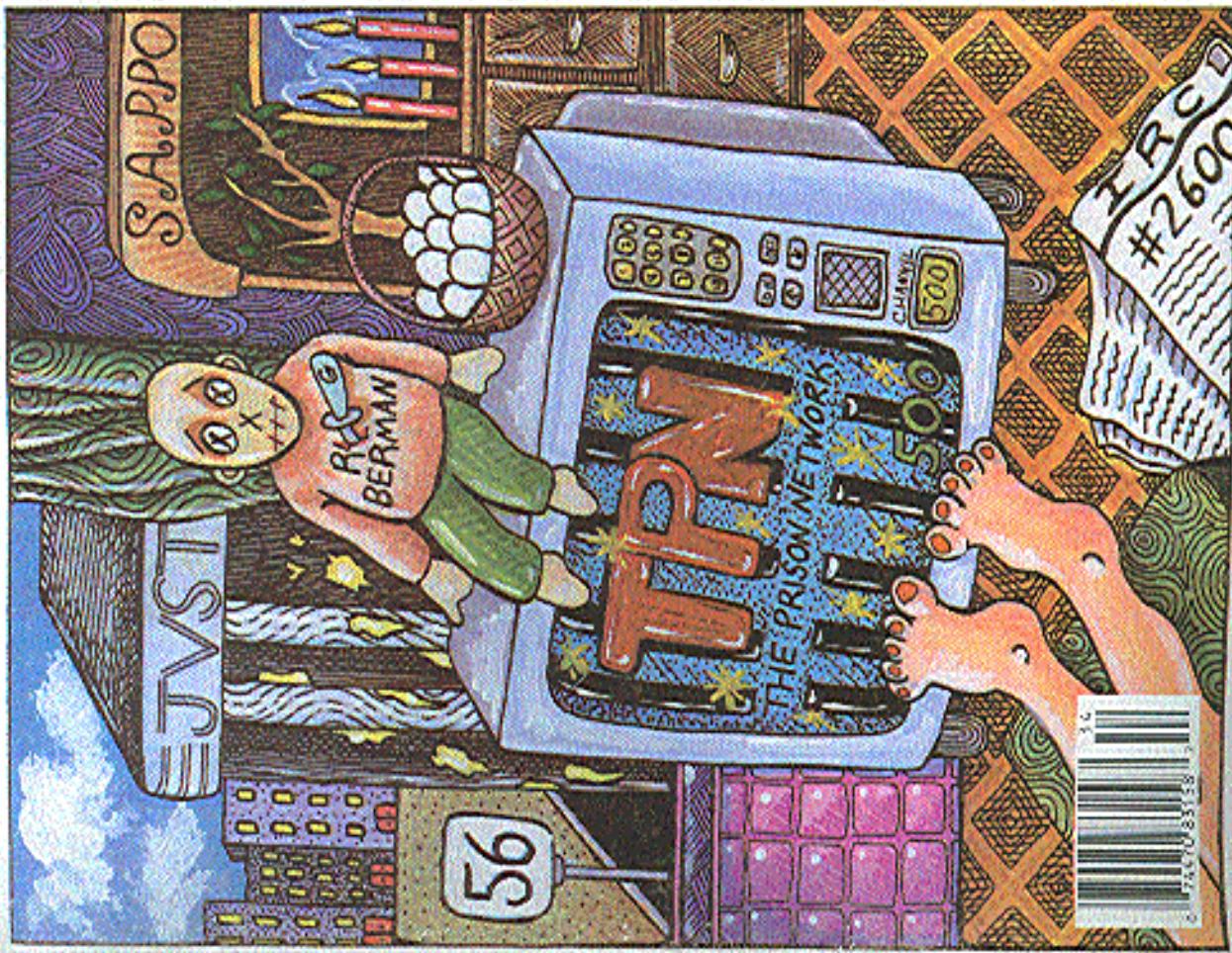
2600



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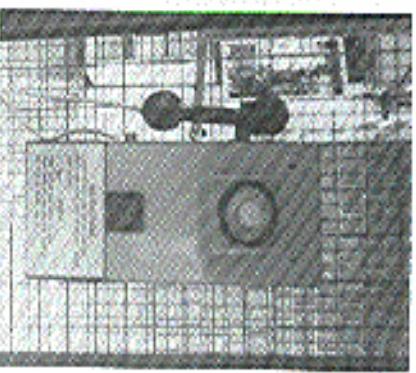


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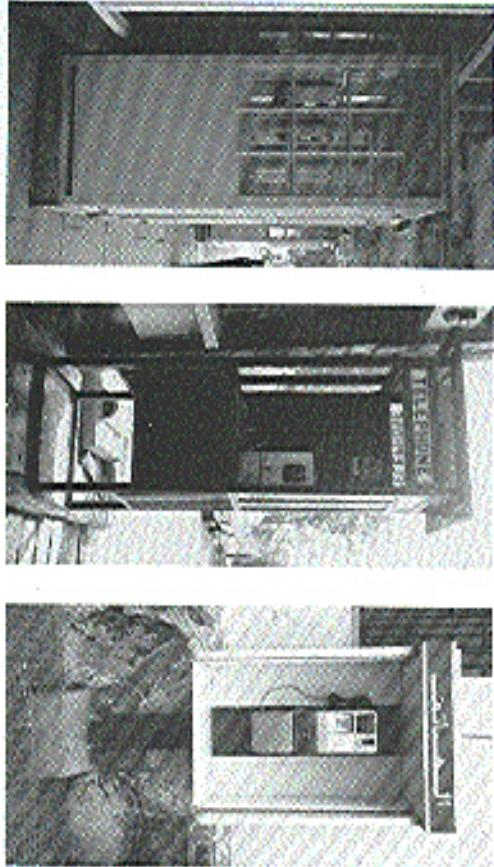
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INDIAN PAYPHONES



(complete with goat)

AFRICA



PHOTOS BY SYNTHETIC MAN

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"At this time the Secret Service has no reason to believe that the suspect(s) in its investigation, or the plaintiff in this case, are aware of the nature of the Secret Service's investigation, who is under investigation by the Secret Service, what information is in the possession of the Secret Service, or who has provided information to the Secret Service regarding this matter." - Secret Service affidavit responding to CP5R Freedom of Information Act request concerning the breakup of the November 1992 Washington DC 2600 Meeting

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CLOCKWISE FROM TOP: Vol, Kenya; Kampala, Uganda (photos by friend of Daniel Jones); Zagora, southern Morocco (photo by Drew Lehman).

SEND YOUR PAYPHONE PHOTOS TO: 2600 PAYPHONES, PO BOX 99, MIDDLE ISLAND, NY 11953. TAKE US WHERE WE HAVEN'T GONE!

Hackers in Jail, Part Two

Yet again, we must pay sad tribute to a hacker who has been imprisoned. Last issue we mentioned that two New York hackers, Acid Phreak and Scorpion, had been sent to prison for six months for "crimes" that nobody was ever able to define in clear terms. Before them were the three Atlanta hackers, who served time for reading a worthless BellSouth document on a password-free computer. And Kevin Mitnick, locked up in solitary confinement because the authorities were afraid of what he could do if he got near a phone. Not to mention Shadowhawk and Len Rose, who downloaded programs that some huge company didn't want them to have and were sent away for it. They were the only ones but they were the ones you might remember by reading 2600 over the years. And now, there's one more.

What was unique about the Phiber

Opik case was the attention it got. Here was a hacker who was not afraid to go public and show people exactly what it was he was talking about. It's precisely this kind of openness that we here at 2600 have been trying to get access for nearly ten years. After all, standing behind voice synthesizers and digital distortion tends to convey the image of somebody with something to hide. Phiber Opik was one of the first hackers to shed this mask and come forward with information. His memoirs went well beyond hacking - anything concerning high technology was a topic worth pursuing. Over the past couple of years, he guest lectured for various college courses on the subject of technology and the general public, made numerous appearances at panel discussions and conferences, was a frequent guest on

WBAL's *Off The Hook* radio program in New York where he would answer numerous telephone and computer related questions from listeners and document on a password-free computer. And Kevin Mitnick, locked up in solitary confinement because the authorities were afraid of what he could do if he got near a phone. Not to mention Shadowhawk and Len Rose, who have come to know Phiber well over the years, we've seen what his driving force has been: the ability to answer questions and figure things out.

In the eyes of the U.S. Department of Justice, it was subversive.

On November 3rd, Phiber Opik was sentenced to a year and a day in federal prison. The charges dated back several years and were sufficiently vague to convince Phiber to plead guilty this past July. After all, a hacker can always be convicted for something and the mystery of not knowing what it is they're going to come after you for is enough to convince many people to plead guilty. (Read a little Kafka if you doubt this.)

The penalty for being found guilty after pleading innocent can be much more

severe. And there is also the financial consideration - legal costs can be crippling, as in the case of Craig Neidorf, even after the government

dropped its case against him. In Phiber's

case, the charges were conspiracy and

access to a federal interest computer.

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computers, this was never something that Phiber denied doing. But it happened years ago, it happened because of bad security, no damage was ever alleged to have been done, and Phiber always was willing to talk about security problems with anyone willing to listen. The government didn't want to hear it.

Judge Stanton, in sentencing him, said, "Invasion of computers is seductive to the young both because of the intellectual challenge and the risk. A message must be sent that it is serious... The defendant stands as a symbol because of his own efforts; therefore, he stands as a symbol here today." In other words, because he has come to represent so much to so many, what better target for severe punishment? The total sentence was for a year and a day in prison, 600 hours of community service, and three years of supervised probation. The judge imposed no restitution because there was no evidence of any damage.

Assistant U.S. Attorney Geoffrey Beaman was positively ecstatic with the decision. He said, "The sentence is important because it sends a message that it is a crime to intrude in public data networks. MOD was one of the biggest hacking organizations in the country. The case was very significant." MOD was the name of the group that Phiber and a few others were in at one point. Hearing it referred to as an "organization" only confirms how clueless the prosecutors were in this case. Basically, they succeeded in sending a few friends to prison for trespassing. Forgive us if we forget the champagne.

So what do we get out of this, we being the people on the receiving end of this message? Well, we've got another prisoner to take care of at a cost

equivalent to four years in college. What we don't have is somebody who can help us hook into the Internet for the first time. We don't have the opportunity to hear another side of the story when the next technological innovation is heralded. We don't have someone to explain what might have gone wrong the next time the phone system crashes. What we've got is a warning - a warning not to stray from the safe curriculum, ask too many questions, expose embarrassing truths, or try to find answers through unconventional means.

Sending hackers to prison is a mockery of justice and one day will be recognized as such. Until that day comes, we can only hope that their lives will not be irreversibly harmed and that those of us on the outside won't push each other into a pit of paranoia as we desperately struggle to remain innocent.

On a personal level, we all feel a deep sadness here at 2600 for what has happened. We don't mean to diminish all of the other cases that have taken place and those that unfortunately will occur in the future. But this one hit rather close to home. It's going to be very difficult to go to a 2600 meeting, analyze the latest *Star Trek*, argue over UNIX, or hang out in our favorite Ukrainian restaurant without thinking of the familiar voices that have been locked out.

For those of you who would like to write to a hacker in prison, Scorpion's address is:

Paul Stira
32095-054
LCC Camp #1
P.O. Box 2000
Lewisburg, PA 17337

Please remember that all incoming mail is read by prison authorities.

cellular phone biopsy

by Kingpin

617

RDT Syndicate

Cellular phones have been a popular topic discussed by media and the underground for the past couple of months. With the rumors about cellular phones causing cancer, cellular scanning laws, and the recent news clips on cellular fraud people of all kinds have become interested and aware of cellular technology. Many

articles have been written on the technical aspect of cellular phones, but there is a lot of information dealing with the cellular phone itself which is not usually shared publicly with the entire community. As stated in the first issue of *Wired Magazine* cellular phones have many hidden functions and abilities which the normal user does not know about.

Since owning my cellular phones, I have been constantly experimenting to uncover unknown functions. Like many people, I feel that obtaining free phone calls is the only reason to reprogram and reconfigure a cellular phone. Going inside your cellular phone seems to be the most true form of hacking. Exploring somewhere where people don't want you to be, gaining knowledge which most people don't have, and having the ability to do things which most people cannot.

Starting at the beginning, getting an owner's manual for your phone will help explain some of the user-available functions. You should also try to get hold of a service/technician's manual. These manuals usually contain the more technical side of the phone, including schematics and sometimes, reprogramming and reconfiguration codes to use from the keypad of the handset.

When you open up your phone, you should observe all of the components. The first one you should find is the EEPROM (Erasable Programmable Read-Only-Memory). This chip is easily found, because it has a little glass window and a number,

usually 27000, somewhere on it. This 24, 28, or 40-pin chip contains the cellular phone's software, and other information which is "cast in stone". The data stored in this chip is unchangeable, unless you read the chip, change the code, and rewrite it.

Disassembling the code is a laborious task, but should definitely be done. The microprocessor in the phone is often a custom-made application processor based on a specific instruction set: Z80, 8051, and 6035 microprocessors are all very common in cellular phones, but are not limited to these types. Be prepared to spend many hours exploring the code to find out how the phone operates and what kind of functions are available. Most EEPROMs in phones have more capacity for data than actually needed, and sometimes there is plenty of room for customization.

Another key component is the EEPROM (Electrically-Erasable Programmable Read-Only-Memory). Usually just battery-backed RAM, this chip can be programmed and configured to your liking from the keypad of your phone. In my own phone, the following (and plenty more) can be accessed and changed by using reprogramming codes:

Electronic Serial Number (ESN)
Initializing the memory (INIT REP)
Changing/Setting the Lock Code (LOCKCODE)

Allow Quick Recall (QRC SET)
Allow Quick Store (QST SET)
Turn the Wake-Up tone on/off (WUT SET)
Mobile to Land Hold (MLH CLR)
Land to Mobile Hold (LMH CLR)
Call Round-Up (CRU CLR)
Extended DTMF (EE SET)
No Land to Mobile (NLM CLR)
Home Alert On/Off (HAL CLR)
Online Diagnostics (ONL CLR)
System ID Enable/Disable (MAN)
Mobile Identification Number (MIN)
Service Providers ID (SOP)
Initial Paging Channel (IPCH)
Extended Address On/Off (EX SET)

IPCH Scan Start - Bank A (DOCCA)
IPCH Scan Start - Bank B (DOCCB)
Access overload class (ACCOLC)
Group ID (GROUP ID)
Long-Distance Call Restriction (LJ SET)
SID "Black List" (NVLID ID)
System Selection (R1 CLR)
Signal Strength Indicator (SSD CLR)
Auto receive On/Off
Transmit Auto Tone On/Off (SAT)
Supervisory Auto Tone On/Off (SAT)
Channel Number
Volume Control
Power Control
Hands-Free On/Off

As you can see, there is plenty of opportunity for configuration. Some phones require special codes to let you change the settings, and other phones require a special handset, cable, or dongle-key proprietary to the specific manufacturer. If your phone requires such a device, it is possible to modify an existing handset or build your own cable.

Anything that is stored in the EEPROM can be changed one way or another. The EEPROM can be read in most standard EEPROM programmers. The RAM usually emulates a 2716 or 2764 EEPROM, but try to get specifications on the particular chip before you plug it into your programmer. Many manufacturers store the information on the EEPROM in plain-text, as to not complicate it for the technicians who are performing tests on the phone.

Some companies are aware that their phones can easily be manipulated, so in order to increase security, a few steps are taken. Some phones contain LCC EPROMs instead of the standard DIP EPROMs. These EPROMs are about 1cm x 1cm, the size of the window on a standard EEPROM. They perform just like standard EEPROMs, except they are surface mounted, harder to erase (although they still use UV light), and because of the size, more difficult to desolder and/or chip onto. In some cases, instead of using an EEPROM or RAM to store the ESN, a NORAM chip is used. This chip can be read by an EEPROM programmer, thus making it extremely difficult to do without chip-specific hardware.

Security for changing the ESN is also incorporated into most of today's phones. Due to increasing problems with cell-site operators, drug dealers, and other people using "cloning" techniques, security has increased greatly. An example follows: The software in one phone provides access to the CPU, keeps track. Once the ESN is reprogrammed three times, a flag is set in the EEPROM and the NORAM, preventing any more access to the ESN from the keypad. It is possible to rid the flag in the EEPROM, but since the NORAM is located in the GPU, and extremely difficult to read and program without special equipment, it cannot be changed and, in order to be able to use the phone again, it must be sent back to the manufacturer for a replacement EEPROM and a clearing of the CPU NORAM. The only way to get around this security is to change the ESN by "hand", directly reading the EEPROM, changing the ESN, and reprogramming. I am sure there are ways around this type of security. There always are.

There are many things which can be done by reconfiguring a cellular phone. For example, by setting the Service Provider's ID (SDH) to 0000 (and sometimes the Group ID), the phone will be placed in "roaming mode". This mode basically means that you are not confined to the service of one cellular carrier, and can choose carriers depending on your location. I will not go into the advantages and disadvantages of roaming, which can be found in other articles.

Configuring the phone so it is able to receive cellular phone conversations is particularly fun. Since a cellular phone is able to receive much of the 800MHz band, by setting the audio receive mode to constantly be active, you will be able to hear any audio transmitted on that particular channel. By changing channels, you can scan through the cellular frequencies, receiving other people's transmissions.

Another interesting trick which can be done is to transmit on a channel which is occupied. To do so, first set the transmit audio selection to constantly be active, and after finding a channel you want to interrupt, trigger the SAT (Supervisory Audio Tone). This will drop the person from the current call, and then you can transmit through the cell site for about five seconds. I do not know exactly how this works, but I assume that you would have a higher priority for use of the channel, which would drop the other call.

Here is a partial list of cellular phone and integrated circuit manufacturers to aid in obtaining information:

AT&T: 800-225-6604
 AT&T: 800-232-5179 (Cellular Services)
 Dallas: (408) 850-0414
 Intel: 800-528-8686
 Motorola: 800-531-6456 (Repair)
 NEC: 800-338-9549
 NEC: 800-367-6321 (Customer Service)

HAVING TROUBLE FINDING US?

As most non-subscribers know, it can be next to impossible to find **2600** in your local neighborhood bookstore. But it's not as hard as you think. If you're in a place that you think we deserve to be in, all you have to do is:

1) Ask an employee if they carry **2600**. They might be sold out or they may have hidden us in a "special" section. Some stores like to stock us behind other magazines, presumably so that they always know where we are.

2) Give them our telephone number. Tell them they should call us so we can hook them up. Say that you'd be awfully disappointed if they were to forget to do this. Appear imposing and capable of causing significant mayhem.

3) Give us their address and phone number. This will give us the opportunity to lean on them ourselves and get real friendly-like until we lose patience.

4) Give up and subscribe.

2600
Po Box 752
Middle Island, NY 11953
(516) 751-2600

NEC: 800-632-3531 (Technical Department)
Novatek: 800-231-5100
Novatel: 800-765-8283 (Cellular Accessories Sales)
Sanyo: 800-421-5013
Sanyo: (201) 825-8080
Sony: 800-222-7550
Sony: (714) 229-4197 (Integrated Circuit Group)
Uniden: (317) 842-2483
Uniden: (317) 842-1036 ex. 598 (Customer Service)
Uniden: 800-447-0332 (Cellular Technical Support)
VLSI: 800-473-8574
VLSI: (408) 434-7227

This article should be used as a starting block, and was written to inform people of the vast possibilities of cell phones. You should experiment with your own phones to see what else can be done.

ELEMENTARY SWITCHING

by **910**

Signals are sent over the telephone network to control its operation and indicate its status. Signalling is essential to the internal coordination of transmission and switching facilities. It also allows the user to submit requests to the network and allows the network to provide the user interpretable responses.

At the beginning of time, humans were employed at the local teleco central office, watching for flashing lamps on their consoles to learn that someone wanted to make a call. The flashing was initiated by my Great Aunt Muriel turning a crank on her phone. The operator plugged her handset into Muriel's jack and determined through verbal interaction the person or number Muriel wanted. If the lamp at the receiving party's jack was until, the operator rang the party's phone and connected Muriel's jack to the receiving party's. If the receiving party's lamp was lit, the operator informed Muriel that the line was in use.

If the receiving party was served by another exchange, the operator called an operator at the distant exchange through an interface trunk, and told her the number of the receiving party. If the receiving party's lamp was until, the distant operator rang the receiver's phone and completed the connection.

More recently, the request for service is made by simply lifting the handset, closing a 48 volt direct current (DC) circuit. The flow of current is interpreted by the switch at the central office as a request for service. This current carries two concurrent sine waves, one 350Hz and one 440Hz, which produce a reassuring sound in the user's earpiece, often called "dial tone". The flow of DC continues as long as the phone is off-hook, and the switching facility uses this information in supervising the line. Specifically, in determining whether the line is still in use.

The number of the party to be called is

conveyed to the switch by the caller with either tones or pulses. The early telephone was equipped with a spring loaded rotating disk, which had numbered "finger holes".

After the caller spun the disk until blocked by a stationary "finger stop", the disk would unwind to its original position at a fixed speed. During its return the disk would interrupt the DC flow as many times as the number dialed (except ten times for 0). If the number dialed was 4, as the disk unwound, the DC circuit would be broken four times for about 6100 of a second, and restored in between each break for 4/100 of a second. Each pulse cycle took about 1/10 of a second. Never non-rotary phones, capable of pulse dialing, interrupt the current similarly, using an electronic control circuit.

A very nimble finger can accomplish the same thing with the hang-up button. More modern phones emit a concurrent pair of sine waves to communicate numbers to the central office. On a standard dial pad, each button on the top row (1, 2, and 3) emits 697Hz; second row, 770Hz; third row, 852Hz, and fourth row (*, 0, and #) 941Hz. Each button in the first column (1, 4, 7, and *) emits 1209Hz; second column, 1136Hz; and third column (3, 6, 9, and #) 147Hz. These tone pairs are interpreted by the switching facility as the number pressed on the dial pad. Although ancient switches cannot interpret tones, new (all) switches can interpret pulses.

The central office provides callers with an aural representation of the receiving party's phone in the act of ringing with a simultaneous pair of tones called "ring-back". They are 440Hz and 480Hz, and bleep for two of each six seconds while the distant phone is ringing.

The famous "line-busy" signal is comprised of simultaneous 480Hz and 620Hz tones, bleeping one half of each second until the call hangs up.

The "trunk-busy" (also called "reorder")

signal is issued when switching or transmission facilities are unable to handle the call. It is identified to the line-busy signal but sleeps at twice the rate.

When all goes well, the receiving party's telephone is sent a ringing signal, not audible to the recipient, but usually inciting a loud bell chiming sounds, or flashing lights, often invoking considerable excitement. This is accomplished with a 20Hz signal of about 75 volts, issued for two of each six seconds until the ringing phone is picked up or the caller interrupts the flow of DC in her phone by hanging up.

A call to a party served by a central office other than one's own requires the use of one or more interoffice trunks. Older long distance lines used a 2600Hz tone to indicate that a trunk is available. When the switch began using the trunk, the caller's central office ceased its issuance of the tone. The distant office was alerted to an incoming request for service by this change.

More recently, interoffice signalling has been moved from the voice transmission circuit to a separate, dedicated circuit. A single data circuit can control thousands of voice circuits, conveying telephone number, trunk availability, and other information. "Line-busy" signals are no longer sent from the distant office. A data signal is sent via the signal circuit, initiating the generation of the audible signal at the caller's office. Previously, sending an audio signal from the distant office required the use of a voice circuit, which is now left free for other users' conversation.

The caller's telephone number is also conveyed through the separate circuit. The distant office knows the caller's number, and the receiving party may also get it. It is sent to the receiving party's equipment as a short burst of digital data, encrypted by pulse train keying. The receiver's equipment must decrypt the signal, and display or otherwise act on it. Depending on the number, the call may be automatically rejected, preventing the phone from ringing, or it may be forwarded to another location.

KNOW YOUR SWITCH

by Rachel

If you've ever wondered what kind of switch serves your exchange, you can just pick up your phone and listen. That's right, you can listen for particular sounds your line makes to find out whether you are on a #1 or #1A ESS, a #5 ESS, or a DMS 100 switch. Also, when you make a call, you can tell what kind of switch you're calling.

For example, when calling from a #1 or #1A ESS, which is an electronic switch, you will notice two short "ketchuck" sounding clicks before the phone number you are calling begins to ring. If you are calling a number that is on one of these switches, you will notice a click when the ringing line is picked up.

On digital switches such as the #5 ESS or the DMS 100, there are no clicks when calls are placed or when the other line picks up. However, there are ways to tell if a #5 ESS from a DMS 100. In the New York Telephone network, if an exchange is served by a digital switch, you can dial that exchange plus the suffix "9001" and a recording will come on and tell you where the switch is located, what exchanges are on the switch, and what type of switch it is. But there is another way to tell for those outside New York. For instance, a #5 ESS has a slight single click before the dial tone when the phone is picked up. A DMS 100 has no click before the dial tone.

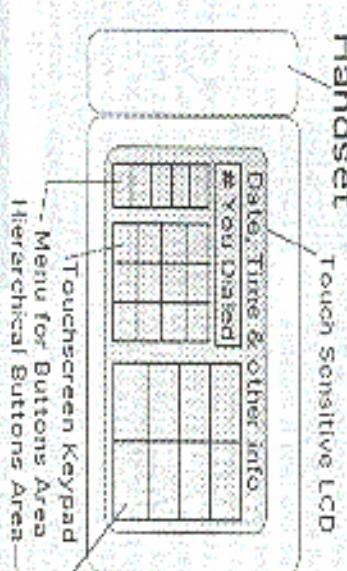
Also, when you call a number that is on a #5 ESS, you will sometimes get a partial first ring. When calling a partial first ring. When calling a number that is on a DMS 100 switch, you will always get a full ring on the first ring. Also, the first ring on a DMS 100 tends to be slightly longer than on the #5 ESS.

Hacking Smartphone

by Tech Rat

Smartphone is a soon-to-be released service available in some areas that will incorporate all the currently available services (call waiting, three-way calling, call forwarding, caller ID, etc.) into one complete easy to use package, and that will access these services through an easy to use interface, which will also allow you to use custom services set up by third-party providers available through Smartphone only.

The Smartphone itself has no dial and no keypad. Instead, the device is about the



size of a large office phone, having the hook and handset off to the side. The main unit consists only of a touch-sensitive LCD screen and a Sharp Wizard with a phone handset attached. The computer that controls the Smartphone is a simple device, costing only a small 16 bit microprocessor and only about 188K of RAM. Upon startup, the phone reads the operating system from ROM, and then loads your phonebook from battery-backed RAM, similar to the way a Sharp Wizard works.

The interface is built around the concept of a hierarchical file system, similar to Windows or Macintosh, with a series of buttons on screen that lead you to other areas that will incorporate all the currently available services (call create and delete directory entries, and they are entered through an alphanumeric keyboard displayed on the LCD. You can set up a hierarchical structure for organizing your numbers such as "friends", "contacts", "relatives", and "emergency". Under each of these buttons on the menu tree is a listing of the names of people you have entered into the system for that button area.

Touching a displayed name on a particular "button" automatically dials the entry. To those of you who work with similar smart

the RBOC computer. You can search by area code, prefix, name, address, etc.... Any database type field is available here.

The next service is personal mailboxes. Here, you can retrieve voice messages, fax messages, email, etc.... Voices are played back through your handset. Faxes are printed to your screen and can be stored locally if they are short, and E-mail can be read, but currently not replied to, since the smartphone lacks a keyboard that can be touch-typed on. This service also allows you to route your calls to another number you may be at at the time.

Next is something called Mach Services. This allows you to do all banking transactions (except deposits and withdrawals) through the Smartphone interface. In this mode, the LCD screen acts like a retarded ATM, except that it contains a few features not available on an ATM. They are: verify check, authorize credit card purchase, and checking account. This service requires a PIN (obviously). Like all the other services, it is meant to be dialed into (and is therefore hackable, once put into service) and then accessed through the Smartphone, which is really just an LCD terminal similar to France's Minitel service.

Lastly are the Righttouch services, which allow you to turn on and off, at your discretion, call waiting, three way calling, call forwarding, caller ID, etc. As services are added, so are buttons on your interface. This service also requires a PIN. After reviewing code for the interface that is being built into the Smartphone, I can honestly say that anyone with half a brain will be able to build a Smartphone compatible interface for their PC and be able to also dial into these services and hack away. While there is nothing about the interface that is unique, its touch screen and buttons would make it difficult for anyone to emulate without a windowing and mouse compatible computer.

All of these services and Smartphone itself are being installed as part of ISDN services, and will be made available to consumers probably near the end of 1995. Basically, to access these services, the

Smartphone dials a local number into the RBOC's packet switching network, then enters a code that corresponds to an address that connects to the service you wish to contact. While the dial-in number is always the same, it will be the addressees that vary, and it will be finding those addresses that will be the challenge of future hacking. As more services become available, you have the option of subscribing to them through the RBOC Pac-net for the New York metro area. These numbers are the ones I know, but there are certainly others that you can find.

If you wish to try finding addresses within a packet switching network, here's the RBOC Pac-net for the New York metro area. These numbers are the ones I know, but there are certainly others that you can find.

212-385-2551
914-875-6504
914-425-0202
516-599-2525
516-685-7278

In all cases, once connected, type 111 and then hit return. You'll see a prompt. Then try an address. It's similar to a regular phone number, like 212-250-054. (This connects you to Wednesday, a local newspaper). If you are smart, you'll be able to write a special scanner for such a network.

TO ALL OHIO BELL EMPLOYEES:

As you know, Ohio Bell faces competitive challenges on every front. Increasing numbers of competitors are entering our markets and vigorously pursuing our customers. In this environment, information means competitive advantage and unauthorized release of our proprietary information.

Recently, in some of the face-to-face meetings, reports have been made regarding former employees accessing or copying company information. Any such copying or accessing of information is improper and prohibited. All Company information is an asset of the Company and must be protected from unauthorized release. Marketing plans and analyses, product plans, switch replacement and cable plant, detailed sales and customer-specific data and other proprietary information are particularly sensitive. Such data must be kept confidential and should only be made available to authorized individuals, such as employees having a need to know such information in order to perform their jobs. Proprietary information should never be made available to employees without appropriate written approval.

It is part of all our jobs to protect Company Information. If you observe someone accessing Company Information and you do not think the person has a legitimate reason to do so, ask the person's identity and inquire as to the purpose of the person's business. If the person is not an active employee with a reason to know such information, ask the person to leave the area and inform the Security Department as soon as possible. Should you have any questions relating to security of information, please contact the Legal or Security Departments.

IT'S A FACT.
If you lend your back issues to a friend, you will lose possibly your friend.
2600 BACK ISSUES
"Don't Let Them Go."



Computer

Ohio Bell

46 Federal Plaza
Cleveland, Ohio 44114
Phone 216 622-7222

Cool Letter Department

SHERIFF'S
DEPARTMENT



DAN T. RICHARDS
Sheriff

P.O. Box 1748
Austin, Texas 78767

(512) 322-4610
Fax 322-4735

County of
TRAVIS
STATE OF TEXAS

October 2, 1992

Mrs. [REDACTED]

Mr. [REDACTED]

Mrs. [REDACTED]

Our office has recently received information that you or other persons of your acquaintance may attempt to gain access to the computer system of the Travis County Sheriff's Department. This letter is to serve as legal notification of the criminal violations that such a breach would involve. Thereafter, if any further information is received of a violation of applicable law is attempted, the courts will be made aware that you have been served legal notice of the violations, thereof. Pursuant to requirement of state law, notwithstanding applicable Federal or Telecommunications Statutes, this office of the Travis County Sheriff's Department will prosecute to the full extent of the law, any and all such persons involved.

[Handwritten signature of Michael O. Henry]
Investigator Michael O. Henry-28
Internal Affairs
Travis County Sheriff's Department

cc: Innate file

*Minor Threat always manages to get interesting letters like this.
But getting one while in prison, now that's something...*

High School Mac Hack

By The Bard

Following up on 999's article on high school PC hacking, I have some tips to pass on to hopeful high school Mac hakers...

To begin with, Appleshare is hard to hack. There are precious few Mac hacks around, so you must exploit the weakest link in the chain - the user.

Collecting Passwords

There are thousands of ways to get passwords from people. The most obvious is simply asking for the password, or offering to help them login. Still, administration will probably infect most users with a paranoia about someone

stealing their passwords - enough to make shoulder surfing impossible. One trick works really well, however: if you know enough programming to write a program with a passable Mac interface, you can get them to enter their passwords! Simply draw a dialog box with something like "invalid login", please re-enter your name and password", (with some appropriate technobabble), and save the results to a text file, to be retrieved at leisure. Of course, if they've locked the hard drive, then you won't be able to put the program on in the first place. The solution is to make a startup disk with a summed down system, put your dummy program into the startup items folder, and leave it in the drive.

Don't forget that most people use obvious passwords, and if you see someone typing on the numeric keypad, try using his phone number or student ID. Getting Superuser Privileges

Not for the faint of heart. If you do spot a computer science teacher hard at work on his Appleshare, hang around discreetly, trying to look as stupid as possible. When he leaves the room for one reason or another, quickly leap over to his computer, make an alias of his Appleshare, and copy to disk. Then when he logs out for the day, you can go back to the computer he used, and open the alias Appleshare. If you're lucky, it should give you all his/her

privileges.

The joys of ResEdit and Norton

(Not to mention Broadcast)

If the hard disk isn't locked, you can use tools such as ResEdit to "personalize" applications (remember, you can really screw things up if you don't know what you're doing). I haven't taken a copy of Norton disk editor to the drive yet, but, since you can uncover hidden files, and hide visible ones, you can hide your

password program, while digging for the password file (I haven't found it yet).

Let me introduce you to a great extension called Broadcast. It enables you to send messages to other computers on Appleshare - all you have to have is a copy of it in the Extensions folder. Makes for great practical jokes - especially on Mac virgins.

I am personally opposed to destructive hacks. Destroying people's files, crashing the network, stuff like that batters the hacker's name. Yet, there are thousands of non-destructive practical jokes for the Mac. For example, write a program that shuts down the computer when it is launched (use code from ShutDown in THMK Pascal) and put it in the startup folder. Thus, the computer turns off as soon as it loads up. (To get around this after the joke's gone stale, boot with the startup disk.)

End Word

The one last piece to infiltrate the system is to start early - late enough so that the Appleshare is loaded in, but early enough so the guards are not up. Try logging in as "admin" or "administrator" with no password. Also, if you see something like "FileGuard" being installed, you can probably slip in an account with full privileges if you get in early enough.

Remember, most network supervisors hate what they can't control. They can snoop around your files, and do anything they want with them (remove copies of ResEdit...), but doing something as simple as DES encrypting a file called "List of passwords" or "Viral source code" can drive a supervisor crazy.

hacking computer shows

by Walter S. Jaffee

The trading grounds of the ancient Mesopotamians, the desert auctions of Bedouin nomads and even the Crystal Palace Exhibition of 1851 can be taken as demonstrations of one proof. If you want to work the buyers into a frenzy, pack them into a tight space surrounded by wares - I mean wares - or do?

Those who have attended any computer industry trade show or exposition must have been struck by the desire to own many of the products being displayed. Unfortunately, price is prohibitive and theft is both crude and illegal. However, it is possible to convince those running the booths to give you what you want. Usually they will be delighted to do so, and offer to send you other products not on display. In a good show, I have collected as much as five thousand dollars worth of software, plus books and some peripherals.

This novice results from years of attendance at many shows, both as an observer and as a corporate representative. Every tip which follows has been used successfully, either by me or against me.

A successful show requires preparation. First, you must get yourself inside without paying. This is simple: ask yourself the question "what group can improve the success of this show?" Call the show organizers, present yourself as a representative of this group and, I promise, they'll send you a complimentary pass. Typically, I present myself as a member of the media. I have been affiliated with a mass media outlet for many years, which gives me a legitimate address and letterhead for this claim. You may want to create a dummy corporation for the same effect.

This raises a different question: should you pretend to be affiliated with a real group? On the one hand, it raises the possibility of their identifying you as a fake; on the other hand, it will greatly

increase your yield of goods collected.

I have toyed with the idea of setting up a dummy consulting firm called "Walter S. Jaffee, Inc." (incorporation costs around \$65 in most states). I could then get the badge printer at a show to print WSJ as my corporate ID. Must computer sales creatures would sell their grandmothers for a good writeup in the *Wall Street Journal*. The WSJ badge would be magic.

Dress the part — printing a company T-shirt would be perfectly in line for regional media outlets. A suit would be better for a national firm. Have business cards.

Once in the door, you have two basic routes to getting free things: you request review copies, or complain about copies you already "possess." I will take these in order.

If you presented yourself as a member of the media to get in the door, try all means keep up the disguise. Many sales people will see your badge and hand you their product without you saying a word.

Others will have to be asked. Many will copy the information from your badge and mail you the product at home. Finally, many will tell you to contact them. By all means, do so. A typical conversation runs like this:

"Hello, Sally? This is Walter Jaffee,

with WQOQ television; we met at the Atom Expo last week."

"Of course, Walter, what can I do for you?"

"We're running a comparative review next month on word processors. We'll be looking at WordChopper 1.0, MicroMail Paragraph, and a few others. I was very impressed with the new release of PhallosWriter and would love to include it in the review."

"Do we have your address, Walter? I'll have that in the overnight mail."

Sometimes they send a crippled copy. Call back to explain that you have experienced computer users testing these programs in head-to-head style, and that

PhallosWriter will suffer grievously in such tests if it isn't save, print, or copy. They'll send you the real thing.

Never give away that you are an experienced computer user yourself. They'll send you the real thing.

Use the term "misuse" just slightly, to give the impression that you have been working in the field for a while, but don't feel comfortable with it.

For more specialized shows, present yourself as a representative of an organization with substantial buying power. Of course, you need to be high enough in the organization to influence purchase decisions, without being so high as to decide on a purchase yourself. Try being a "Systems Consultant" or the like. I highly recommend the *Dictionary of Organizations*, which you can find in any good library and which will give you an almost endless list of appropriate, real organizations which you may want to represent. The National Science Teachers Association is a perennial favorite. Beware, real members may be at the show. Your BS skills must be well-practiced to escape from such an encounter.

If the idea of collecting goods in this way bores you, try the second approach: complaining about the ones you "already have." Imagine the effect on a small company, which has shelled out 30% of its annual advertising budget, to attend a show, of having a screaming, dissatisfied customer at the mouth of its booth. The sales representatives will do anything to get rid of you. At the MacWorld Expo in August, a young lady approached the booth in which I was working and gave a furious dressing-down to the company president, complaining of bugs in our software. Several things she said made it perfectly clear that she had never owned the software, but had seen our demo. However, rather than challenge her, one of the booth personnel ran over and gave her a copy of the new release. This got her out of the way.

Later in the day, I tried the same technique on another booth and found that it worked quite well. I think it works best when women use it against men.

MOVING?

Let us know several weeks in advance. For some reason the post office doesn't forward magazines. So you might miss an issue if you don't let us know about your new address. Also, to make sure it's actually you changing your address and not some mischief maker, we ask that you include your address label with any correspondence. If you can't find that information, then use an official address change card from the post office. Please don't leave address changes on our answering machine or through email without label info.

The most serious weakness of the technique is that you can't use it on two booths somewhere near each other.

Finally, if you have anything to trade for goods, you can probably find the opportunity to do so. Groups of firm representatives get together for parties in shows. These are excellent targets. You can trade T-shirts for \$600 packages without guilt.

Parties of homosexual or minority programmers take place at most major shows. These are excellent targets. You can also go booth-to-booth trading, though this is a bad idea until the last few hours of a multi-day show. Big companies are just as generous as small ones. Many firms will want feedback from you; send some if you can. At the same time, job turnover in press/industry relations is so quick that the person to whom you promised a copy of your review might be gone by the next show anyway.

ANNOUNCING

the first

January 26, 1994
beginning 12 noon (EST)
on irc channel #2600

(If you don't understand any of this, don't worry. We'll explain in a future issue.)

The Magical Tone Box

by Fyberlyte

Intro

The tone box is my latest mad invention. This device will satisfy your phreaking needs well into the future.

There is a new technology out called

DAST: Direct Analog Storage

Technology. What this is is an EEPROM which writes analog data directly, without A/D or D/A, on a single chip. What this means for you is, any tone related box you need is yours with this simple and very compact project. The cutoff for the high frequency output is at 2700 Hz, so red box tones and blue box tones will fit in, so there shouldn't be any problem. Besides, phones cut off at around 3000 to 3500.

Advantages

1. Compact package and low voltage.

2. Better than a microcassette recorder, because when their batteries go down, the amplitude as well as the frequency decreases, resulting in unworthy tones and pissy operators. When the batteries go down on this (from 5 down to 3.5v) it gets stuck in play mode, so it has its own low-batt alarm. Thus, no loss of quality.

3. Record any tones. One day you can have a red box, the next a blue box. Any tone can be yours.

Purchasing

Radio Shack is where you can (never) find this ISD1000A. That was my problem - none of the local ones had it. I should take this opportunity to bitch about Radio Shack and their incompetence, but you all would rather get on with the box. The part number is ISD1000A and is made by Archer

and the chip will run you exactly \$18.80 including tax. The total cost will be around the price of a Radio Shack 33 memory red box conversion, but probably a bit more.

Pre-Construction

You will want to check inside your computer for a Soundblaster, as this is needed to create tones, or if you don't have one, you could record red box tones from a Radio Shack conversion. What I am saying is, you need something that generates tones that you will want to record.

The following is what I used, not including the electronic components.

Parts List

ISD1000A (the chip)
Small 6VDC battery (an Energizer A544 will be perfect)

Case (I use a film case, you know those little black and gray canisters)

16 Ohm speaker (go to a dollar store and buy some cheap Walkman headphones)

28 pin socket (do not buy the Radio Shack ones if you can help it, find one with an open design, instead of Radio Shack's weird design)

Soldering iron, of course

Microphone

The breadboard is important. What you will be doing is building the record circuit on the breadboard, and then the play circuit right on a 28 pin socket. You can pop the chip into the breadboard when you need to record and then pop it back into the play circuit when you are ready to play. This will prevent any etching and will keep the play circuit small.

As soon as you buy the chip, open the package. Inside there will be a

manual. Turn to page 6 and buy all those components and some solid wire. Skip S4 and R7-R14 since we will start recording at the beginning address, and also skip the 8 ohm speaker and the electric microphone, since you will be using a normal, higher quality microphone and a 16 ohm headphone speaker.

Building

When you get home, unpack everything. Breadboard the circuit on page 6, noticing that you will choose the simpler construction (bottom right corner). Then solder the play circuit that is on page 7 onto the 28 pin socket. Remember that you will try the chip if you solder directly onto it, so use the socket! If you must use the Radio Shack socket, try to make sure no rosin or solder sizzles down the pins into the dips. I had this problem on two sockets which wouldn't allow me to play. Pop the chip into the recording circuit, load up QUARTERVOC or use the Radio Shack dialer or whatever else and record. Recording instructions are found on page 7. Then pop the chip into the play circuit if it works, then you now have a red box. Remember, as long as you have the tones, you can record them.

Use

If you can find BlueBeep, versions

004 and above, you can use the red box tones included.

QUARTERVOC that I use has worked successfully on all phones to a live AT&T operator. In places where the Radio Shack didn't work, the VOC did. As a red box, the simple play circuit is fine because all you have to do is hold down the switch. Even though blue boxing is not possible for most people, the tone box can be used as a blue box. For a blue box,

you need to do some addressing, which is explained in the manual. Depending on which pin (pins 1-10 only) you connect to ground you can address that corresponding address in memory. So, for a blue box you would set for address 1 the 2600 blast, address 2 the KP1, and address 3 the ST. So, to seize, hit 1, 2, dial on the phone's keypad (or your own dialer), then 3.

cap. You might want to use a speaker grille. Next, cut a hole in the bottom of the black cylinder big enough for your pushbutton switch. You should know how to wire up a switch. The chip, battery, socket, switch, and speaker all fit in perfectly. Everything fits in mine, but you might need to cut off the bottom part of the speaker. The unnecessary plastic part.

How to Build the Film Case

Take the top off of the case and your headphone speaker should fit perfectly in the gray cap. Cut a hole in the top and glue the speaker into the

WRITE FOR 2600!

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charged with any crime for too red boating. Although the teleo has become more privy to red boating activities, nothing has come of it, so far.

Concerned

As explained in a feature in our Winter 1992-93 issue, that particular modification will always provide a lower of 1721.0 Hz and 22081.1 Hz, and the dialing will always be 59-52 red on and off. The concern is that theoretically it would not be difficult for those unique buttons to be looked for by the phone companies. We're aware of this ever actually happening.

How Easy It Is

Dear 2600:

My school is running on an Ethernet. ICLAS system (IBM Classroom Administration). It is a real easy network to hack, and the thing that happened a few weeks back that really showed me how loose the security was, was this. A hacker wannabe logged in to the network as sysop with a valid password when he sat behind the teacher who was 10 feet behind him. With his ICLAS software when you log in as sysop or supervisor, it makes that really loud annoying sound. I am really surprised that the teacher, who is also the computer custodian for our school, did not notice. It just goes to show that even with a title like "Network Computer Cooperaator" people can't do a simple job of watching if someone logs in as sysop right in front of your face!

Cupkittler
Bethesda, MD

Dear 2600:

I just read the review of NIPASS in the November 1993 issue, and I must tell you that there is a much better and cheaper way to accomplish the same results or better. I have an NLM on my BBS (see Pinck 4&6) which will create a temporary SUPERVISOR equivalent account with a name that you specify.

The name of this wonderful NLM is TELNSUP. And all you have to do is stick this puppy on a floppy and type LOAD AT&TNSUP <account> at the server. An account will be inserted into the system with SUPERVISOR privileges, which will allow you to create an account using SYSCON, among other things. The advantages to this are obvious over NIPASS... no charge to the SUPERVISOR password, and doesn't generate a broadcast, and it doesn't cost you \$245. Plus, you don't have to call the company every time you want to use it.

This program is, of course, solely to demonstrate how to use an unlocked NetWare 3.x file server. It should never be used for any other purpose!

Ermeth Akke

Bypassing Restrictions

Dear 2600:

First off let me say that *The Hacker Quarterly* is one of the best publications I have read in a long time. It calls of all the things that Mr. Computer Science Prof should have told you but wouldn't, most likely

because it might endanger his/her control over students. However, I am sending this mail mainly because our fees/Star systems (I don't really know if he is a Net, or just stated of free access in information) has so severely restricted our access to the Internet that most of the newsgroups are academic related or baseline conversation topics. Anything that might pertain to socially deviant behavior, hacking, learning something, no government regulation, etc. has been deleted. In fact this morning over 1000 newsgroups have been screened out from our system. Is there any way for a person to get around this? Or is there a way for a person to get around this?

I have tried to get more info on InterNet, but even aspiring more than a soccy-like explanation of the system is impossible around here. Shameful, doesn't even trust his own computer science students. Any help would be greatly appreciated.

Lost and regulated in
NB, Canada

Dear 2600:

Your story is very articulate, unfortunately. Of course, people in charge feel the need to restrict us out of access. *Sorry* from making sure we never turn into people like that. The best thing we can do is look for ways around it. Since you already have access to the Internet, it shouldn't be too difficult to find our way around it that I'm as restricted. Perhaps you could trade a computer with a student at another school or subscribe to a cheap public BBS system. Right the person it for private, free, anything is possible.

A Way Around Caller ID?

Dear 2600:

I recently finished last issue's article on Caller ID. After reading this interesting piece, I came up with a thought for jamming Caller ID.

1) Call XXX-XXXX and hang up immediately before you hear the ring. This will send a ring through to the called party, prompting their CID unit to answer. If you provide CID uses a normal modem hookup, it will attempt to connect, even though there is nothing to connect to.

2) Call XXX-XXXX identically after you hang up. If you use an answering machine, this might be able to get through with two or three seconds between the calls. The called party will receive the ring, but the CID unit will not have received in time to receive the signal from the telco. This would allow a quick and easy way around Caller ID, especially if #67 is not available. I would try this myself but Caller ID is not yet available in my area (i.e., New York Tel hasn't flipped the right switch yet.)

Levee

Dear 2600:

I just finished perusing your Autumn '93 issue, and immediately wished it had arrived at the local Barnes and Noble just a week earlier. That week, while applying for a job at an arcade of all places, I was

School Phone System

Dear 2600:

My school's got an interesting phone system. Because all the numbers on campus start with the same two digits (2 and 5), every phone on campus is set so you only need to dial the last five digits to get where you need to go. For example, for dorms you dial 3-XXXX, and offices can be had by dialing 4-XXXX and 5-XXXX.

What's interesting is that this town also has other phone exchanges, such as 227 and 256. However, to dial these exchanges you need to dial 9-7 first, and then dial the full number. To dial toll-free numbers, you hit 9-7 and then the full number. 9-7 also works for this.

I'm fairly sure the school has its own switching system, but it doesn't quite make sense. I've tried to dial both "9" and "7" at public campus phones, with no luck whatsoever. It only works on phones in the dorms. Hitting either of those at public phones produces an alarm of alternating high and low-pitched tones.

What hacking potential exists? Can you please explain how this works? It's fairly interesting, and I'm quite curious how the system differences between the phone in my room and the public speakerphone outside my building.

Levee

Dear 2600:

I recently picked up my first copy of your magazine and couldn't put it down for days. It is the source for information I have been looking for that you can't find anywhere else. By showing how different systems can be manipulated, I have gained a much better understanding in their operation. One of my current classes is an operating systems class in which I am studying how a UNIX-like system works. By demonstrating a shell process that uses many of the features available in UNIX, your article gave me a much more tangible grasp of the system than my class ever could. Thanks for the enjoyment.

The Vampire Gabrielle

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IG
Georgetown, TX

Dear 2600:

I just finished perusing your Autumn '93 issue, and immediately wished it had arrived at the local Barnes and Noble just a week earlier. That week, while applying for a job at an arcade of all places, I was

asked to (and took) one of the very honest tasks you described in your articles.

The manager I submitted my application to referred to it as "the test" (formally called a "PSI examination") as a personality evaluation, completed so the company could ascertain "what kind of a person I am." Previous to taking this test I had not been familiar with this type of evaluation, so I went in after reading the first few questions. I pegged the "test" for what it was, with its misleading questions geared to face one to trip up.

Unfortunately, even reading the letterwriter's motives, I screwed up according to your article. I attempted to answer The Questions in a way that are fairly sure the school has its own switching system, but it doesn't quite make sense. I've tried to dial the correct number, but the possible answers are all assigned a number, and the numbers chosen by the test-taker are referring to the approximate value of all monies or property taken from a one-job position. On a better note, the job wasn't all that important to begin with, and it takes no that as honesty test might have had me a job with this company. Unfortunately, the manager who was on the phone with me, had no clue how the test was scored or evaluated when I inquired. What she did know was that the possible answers are all assigned a number, and the numbers chosen by the test-taker are recorded and read over the phone to the district headquarters of the company. The company presumably finds the numbers into its computer and out pops out a rating as an honest individual. There was also a free form written part of the test where the test-takers asked if there were any inconsistencies or confusing questions on the test that we would like to comment on. Needless to say, I wrote them an essay....

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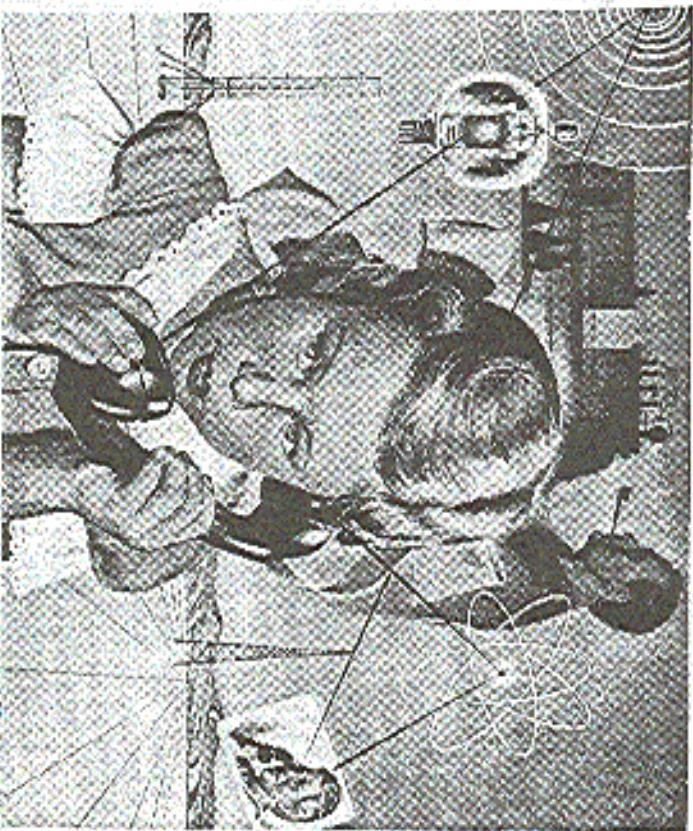
"Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances."

"All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

These two paragraphs are the First and Fourteenth Amendments to the Constitution. The first says that as a citizen you have a legal right to peacefully assemble and the federal government cannot take that right away from you. It does not say that a State has to allow you to assemble. This was the case until June 9, 1868. The Fourteenth Amendment applied the Constitution and its protections to the States. Retrace this, each individual State could prohibit the free assembly of persons.

Presently, we can gather on public space and discuss whatever subject comes to mind. There are exceptions to this, however. You cannot stand on the corner of Broadway and discuss the violent overthrow of the government. Nor can you discuss the intimate details of your love life.

So what have we learned? The First and Fourteenth Amendments allow us to gather for meetings anywhere we want, and no one can stop us. Right? Wrong! The Constitution applies to governments and is limited in its application of powers to private industry. For example, in Washington, D.C. there is a law called Unlawful Entry. It states that any person who willfully remains on any property after being asked to leave by the rightful owner or person then in charge is guilty of a misdemeanor and subject to arrest. The constitutionality of this law has been tested and affirmed. Your local jurisdiction may have a law similar to this under different names (Criminal Trespass or Trespassing). The easiest way to find out is to pick up a (pay) phone and call your local police department. Ask them. Don't be afraid. You cannot get in trouble for being a licensed citizen.



MORE MEETING ADVICE

What is the basis for these laws? Consider this:

You own a beautiful piece of property that overlooks a great seashore. People are using your property for religious gatherings and artistic inspiration without your permission. If the constitution applied to private property you couldn't stop these people. But since it does not, you can have them removed or arrested, if your local law allows.

Of the 20,000 meetings that take place throughout the U.S., 13 take place in malls. Even other private places, and two are unknown to this writer. Citicorp Center and Amtrak are private institutions. It sounds like the Gallerie on South University and Union Station are also private but I cannot tell by their names. Malls are almost exclusively privately owned. I cannot recall seeing a government owned mall lately. Being privately owned, the rightful owner or the person then in charge can ask you to leave (depending on your local law). The sad thing is that you will have to follow his directions and then follow up with a civil suit. What you have that sent to is another problem. It would not fall under a racial bias, nor a gender bias. If you do not leave at their request, you leave yourself vulnerable to arrest. What does this mean to us dedicated 2600ers?

When you are attending a 2600 meeting, be sure to know the law in your area. If you are hosting a party or attending a party at a mall or on other private property, be informed. When approached by a security officer, police, or the management, can I go on blabbering how the First Amendment allows you to gather any place you like. If doesn't. Instead, do the following:

1) If the area you are meeting in has stores, purchase some merchandise that is sold in these establishments prior to your meeting. When approached by the charging person, explain that you have just made purchases from the establishments. Does he/she really want to throw out a buying customer?

2) Explain to the charging person your intentions of the gathering. Don't forget these points: You chose this area because a) it is successful/reputable; b) it is great location; c) the time mechanism; d) all of the above. This sounds like a bunch of crap (which it is), but it will strengthen any cover story you bring about in the future.

3) As a last resort, inform them of your research into the local laws and ordinances of

HACKERS FOR "BOB"

trespassing. If possible, give them a copy of the law. Ask them to have the police respond. When an officer arrives, explain that this security officer is unlawfully asking you to leave when you wish to stay. But, if a police officer asks you to leave, do you? Do not ask for his name and badge number. You can see that, if you can't, find his car and write down the ID number. Then call the station he is from and ask to speak to a supervisor. Inform the supervisor of the squad car number, the description of the officer, and what happened. Make a written complaint if possible.

You must remember to be calm and rational during these proceedings. If not, you could be placed under arrest for disorderly conduct or some such. Although not what you were originally bothered with, the security officer has succeeded in his task to get rid of you.

2600 meetings are great ideas for the free exchange of ideas and etc. in theory, what this country was founded upon. But, they are not worth getting arrested for if you are wrong. There are plenty of legal places to hold meetings. Try a public park or parking area. Call your local seat of government and ask to use their meeting room. How about that for irony? Using a government establishment to hold a 2600 meeting! Under the First Amendment, they cannot deny you. Look at the court record of such groups as the KKK. They meet and march on any public space they like with the proper permits. 2600ers can do the same.

In writing this, a few friends have raised valid questions, which I am sure other 2600ers will ask. What about conspiring to commit a crime? Isn't meeting to discuss committing crimes illegal? Yes and no.

Conspiracy is defined as to "agreement to perform an illegal act. Most times, in defining the acts that constitute conspiracy, require an overt act. The best definition would be an example itself. John and Bill are eating dinner while discussing robbing a bank. They talk about the getaway etc., what type of gun to use, and the best time to commit the robbery. Both finish dinner and go their separate ways until they meet at work the next day. John tells Bill he bought the gun and obtained the getaway car. As of this moment, John and Bill can be arrested for conspiring to commit a bank robbery.

The First Amendment protects our freedom of speech to a degree. If John and Bill had not done anything else but talk about the bank robbery, no harm could have come to either of them. Since John purchased the gun and getaway car, he showed his intentions to follow through with their plan. This was the overt act. This was what got

them into trouble. Both can be arrested, but the case of innocence for Bill is very strong. It would be proven in court, requiring the expense of thousands of dollars for an attorney. A court-appointed attorney can be assigned, depending on financial need, with his/her cost coming out of taxpayer money.

One can see the parallels of this story to that of 2600 meetings. Yes, 2600ers gather in places to discuss illegal acts. Are they conspiring to commit these offenses? Maybe. It depends upon each individual person. Let's say a conversation was initiated dealing with the sale, no possession, of proprietary information. No one from the discussion group does anything to forward the idea of the sale. Is this legal? Yes, under the First Amendment. What if one of the members contacts an underground fence offering the document for sale based on information he discussed at the meeting? Is this conspiracy? I'm sure Law Enforcement could substantiate enough evidence to bring about the arrests of the discussion group, but would they have enough evidence to prove "beyond a reasonable doubt" their case in court? Maybe not. However, they have succeeded in harassing the group and costing both the taxpayers and the group members several thousands of dollars in court and attorney's fees. Do you have any means of redress? You could try to sue for damages incurred due to the inconvenience of the arrest, but if the Law Enforcement agency did its job correctly, you will not win.

I cannot speak for all states but the basic for most laws are the same. As mentioned earlier, call your local police or the nearest state police office. You cannot get in trouble for asking. Also ask for examples and a written reply.

The writer is "heavily involved" with the law enforcement community.

THE 2600

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by Howard Rheingold

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Review by W. Ritchie Benedict

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murdered persons. The author was one of the first to

use a NASA prototype in 1988 that demonstrated the amazing potential capabilities of the system - the major drawback being a time lag when the operator moved his hand. So, what good is it all, other than the ultimate in video-game realism? Not, for starters. It holds promise for architectural design, flight training, planetary exploration, medical and chemical research, and even simulated sex. These are already moves underway to bring the dimension of basic sensation to the structures, possibly by means of a hypnosis.

One can see the parallels of this story to that of 2600 meetings. Yes, 2600ers gather in places to discuss illegal acts. Are they conspiring to commit these offenses? Maybe. It depends upon each individual person. Let's say a conversation was initiated dealing with the sale, no possession, of proprietary information. No one from the discussion group does anything to forward the idea of the sale. Is this legal? Yes, under the First Amendment. What if one of the members contacts an underground fence offering the document for sale based on information he discussed at the meeting? Is this conspiracy? I'm sure Law Enforcement could substantiate enough evidence to bring about the arrests of the discussion group, but would they have enough evidence to prove "beyond a reasonable doubt" their case in court? Maybe not. However, they have succeeded in harassing the group and costing both the taxpayers and the group members several thousands of dollars in court and attorney's fees. Do you have any means of redress? You could try to sue for damages incurred due to the inconvenience of the arrest, but if the Law Enforcement agency did its job correctly, you will not win.

I cannot speak for all states but the basic for most laws are the same. As mentioned earlier, call your local police or the nearest state police office. You cannot get in trouble for asking. Also ask for examples and a written reply.

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DIGITAL LOCKS

ANOTHER CONTRADICTION IN TERMS

With only 1287 possible combinations, the fully mechanical Digital locks are sure to be a hit with the kids. Even still, we hacked one (the one pictured in fact) and found the experience dull if not plodding. Call us sentimental, but for some reason, it just wasn't as fun as cracking a Simplex lock. Besides, they're hard as hell to find in the first place.

The lock's combination is always five alphanumeric characters long, chosen

from a possible ten digits (0-9) and three letters (X-Z), and the order doesn't matter.

Be sure to press the 'C' before each coronary to clear the lock.

01834 01280 01459 01502
01229 01202 01458 01503

125.0 125.0 125.0 125.0

Y	0.282	0.548	0.489	0.187	%
0.285	0.130	0.162	0.099	0.035	10
0.248	0.142	0.128	0.099	0.035	10
0.245	0.130	0.162	0.099	0.035	10
0.242	0.130	0.162	0.099	0.035	10

Year	Revenue	Profit
2015	1000	200
2016	1200	240
2017	1300	260
2018	1400	280
2019	1500	300
2020	1600	320
2021	1700	340
2022	1800	360
2023	1900	380
2024	2000	400

0133X 0133X 0133X 0133X
0124X 0124X 0124X 0124X
0184X 0184X 0184X 0184X
0125X 0125X 0125X 0125X
0136X 0136X 0136X 0136X
0148X 0148X 0148X 0148X
0169X 0169X 0169X 0169X

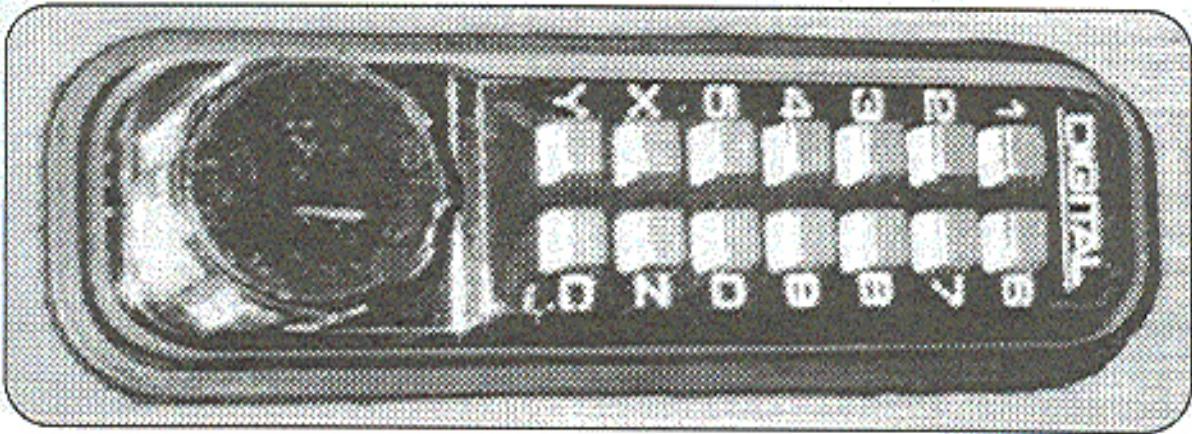
01856 01352 0148Y
01257 01367 01462
01879 01368 0149X
01789 01369 01789

0.958 0.959 0.960 0.961 0.962 0.963 0.964 0.965 0.966 0.967 0.968 0.969 0.970 0.971 0.972 0.973 0.974 0.975 0.976 0.977 0.978 0.979 0.980 0.981 0.982 0.983 0.984 0.985 0.986 0.987 0.988 0.989 0.990 0.991 0.992 0.993 0.994 0.995 0.996 0.997 0.998 0.999 1.000

0.001 0.012 0.000
0.002 0.008 0.000
0.003 0.005 0.000
0.004 0.003 0.000
0.005 0.002 0.000
0.006 0.001 0.000
0.007 0.000 0.000
0.008 0.000 0.000
0.009 0.000 0.000
0.010 0.000 0.000

Category	2010	2011	2012	2013
Crude oil	100.0	100.0	100.0	100.0
Gasoline	226.0	226.0	227.0	227.0
Diesel	136.0	135.0	135.0	135.0
Gas oil	125.0	125.0	125.0	125.0
Jet fuel	129.0	129.0	129.0	129.0

APR 20 1998 1005 0 85510 28510
MAY 20 1998 1005 0 85510 15210



*Digital locks:
Not as fun as Simplex.*

2600 Marketplace

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Start the Insanity!

Now that pre-paid phone cards are starting to appear in the United States, card collectors are starting to appear too. Phone companies are encouraging this by producing collectible and unique telephone cards, sometimes centered around special events. like the Democratic Convention in New York City in 1984. On September 25th, Roanoke, Virginia hosted the first International Credit Card Collectors' Convention. See this section for cards involving the current, eassy, that are in and stamp collectors constantly experience. You can flip over pictures of more than

400 telephone cards by sending the 1993 IT 5 Telephone Card Catalog, available for \$3 from: U.S. Overhead, P.O. Box 8211, Melville Beach, FL 33757. You can also get information on a publication called International Telephone Cards by writing to 2855 Maser Road, Colchester, Essex CO3 3XG, Great Britain.

Who really benefits from piece rates? One has to wonder when all of a sudden the piece companies turn into insurance beechers. For \$1,200 a month (don't get caught in the surprise!) AT&T will cover all residential phone costs above \$25,000. This, naturally, doesn't include the pay-up fee. If AT&T fails to notice the encounter of the fraud, the insurance only has to pay \$12,200. Sprint has a similar feature, no doubt.

Did you know that BellSouth is representing well over 100 telephone companies? BellSouth's telephone system is designed to provide the best service possible so the telephone companies can focus on their core business. We'd like to know how much time would be saved if you could get the phone companies to lose their telephone costs on this plan.

Meanwhile, in Canada, 911 is being addressed for deaf people who will be able to reach a relay services center with a TDD user interface.

free, etc. So AT&T's plan would not reduce service in the 905 exchange that are "business related" and have nothing to do with entertainment. (This means the USA Today's 900-555-5555 number would most certainly have to vanish.) Despite theseistics, it still seems to us that AT&T is taking advantage of a security hole to raise more and more revenue.

The 200 area code has reportedly been allocated to AT&T for its one-number personal communications system. Once again, it's likely that the 500 area code is being allocated to multiple carriers for similar services. We don't know if this means subscribers to AT&T's Easyreach service, currently reachable on 6000 numbers, will have to change their phone numbers. It would be pretty ironic, though, since the service's initial selling point was that you would never have to change your number.

Some new country codes for some new countries: the new Yugoslavia (Serbia and Montenegro) - 381; Macedonia - 385; Croatia - 386; Slovenia - 386; Macedonia (not the Greek one) - 382; and Bosnia and Herzegovina - 387. Don't expect to get through on the 386 one for quite some time.

Journalistic Integrity

Our local daily paper, *Newspaper*, pride itself on being technologically savvy. All too often, though, their attempts fall flat. For instance, a story this summer extolled the *Blackberry Head Plan for Bigotous Adults*. In other words, somebody who uses them on a radio and listen to unencrypted phone calls is seen as *Newspaper's* eyes as a hacker. Also, according to *Newspaper*, a pan register is a metal box roughly the size of a VCR, which is connected to telephone wires and prints out the telephone number of any outgoing calls. But with the flick of a switch, it can also be used to listen to

The Kudu Sheath CPC-0.000 came out last year and could fit in the palm of your hand. We suspect the professional staff is even smaller. And pen registers are not used to listen in on phone calls. If they are, then they *stop* being pen registers. It's really quite simple.

The Joy of New Technology

officials are experimenting with a computerized monitoring system to replace the system of visiting probation officers. Once a month, probation clients call a special number to report any changes in their status and any predators they may have had with the law. If they probably go without saying that it's a 900 number. A computer speaks to them and, according to officials, it's very effective. "We have had people report violations that normally would not be reported to our probation officers," said Leslie Del Prete, chief

is a wireless system built in. They think the great computer network is the sky, with satellites that up with them if they're flying. "Law enforcement types just love to spread those misperceptions around."

Vol. 30, No. 1

Magazine, the Harbor Quarterly, based in New York. Our source goes on to advise us that a good way to protect shipper's divers is to either send sensitive material in seal in canisters and arrange to have the carriers picked up by the mail carrier, with instructions to destroy them. Our corporate source does not rule out some other form of protection, but we are not sure what it is.

